

### **Amendments to the Drawings**

The attached sheet of drawings contains changes to Figs. 1 and 3. This sheet, which includes Figs. 1 and 3, replaces the original sheet including Figs. 1 and 3. In Fig. 1, feature 30 has been labeled and previously omitted features 32, 34, 40, and 42 have been added. In Fig. 3, feature 30' has been labeled.

Attachments: Replacement Sheet

Annotated Sheet Showing Changes

## **REMARKS**

This amendment is responsive to the non-final Office Action mailed on July 10, 2006. Claims 1-9 and 11-14 are pending and claim 10 is cancelled. Applicants have elected to amend the specification, drawings and claims as indicated by the Examiner. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

As a preliminary matter, Applicants have amended claims 1 through 9 and 11 through 14 to remove the reference numerals from the claims.

### **Objection to the Specification**

The disclosure stands objected to because of informality. The term “capton”, indicated as misspelled by the Examiner, was not found in the specification. Nevertheless, Applicants have amended the specification to reflect, per MPEP § 608.01(v), the use of the registered trademark, KAPTON®. Accordingly, Applicants request that the Examiner withdraw the objection.

### **Rejection of Claims under 35 U.S.C. § 112, Second Paragraph**

Claim 1 stands rejected under 35 U.S.C. § 112, Second Paragraph, as being indefinite and as also being incomplete for omitting essential elements. Specifically, the Examiner contends that claim 1 lacks antecedent basis for the term “the wall” and that structural elements of the detector chamber, such as “the wall,” have been omitted. Applicants have amended claim 1 to set forth that the detector chamber includes a plurality of walls. The term “the wall” refers to one of the walls of the detector chamber. In view of this clarification to claim 1, Applicants have elected to not introduce structural elements of the microscope column. Applicants have also amended claim 1 to provide proper antecedent basis for the term “the active surface of the sensor.” Accordingly, Applicants request that the Examiner withdraw the rejection of claim 1 and dependent claims 2, 3, 5-9 and 11-14.

Claim 4 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 4 has been amended to replace the trademarked material KAPTON® with the

generic equivalent term “polyimide.” Accordingly, Applicants request that the Examiner withdraw the rejection.

### **Rejection of Claims under 35 U.S.C. § 112, First Paragraph**

Claim 2 stands rejected under 35 U.S.C. § 112, First Paragraph, as failing to comply with the enablement requirement. Independent claim 1 has been further amended replacing “diaphragm” with “electrically conductive grid.” Claim 2, which depends from claim 1, now only claims an electrically conductive grid, which may be made of copper as disclosed in the specification. Accordingly, Applicants request that the Examiner withdraw the rejection.

### **Objections to Claims**

Claim 1 stands objected to as the claim referred to a diaphragm as being drawn to a conductive grid and a KAPTON<sup>®</sup> diaphragm. The amendments made above to claim 1 to overcome the rejection in claim 2 have corrected the informality. Applicants request that the Examiner withdraw the objection.

Claim 3 stands objected to for lack of antecedent basis. Claim 3 has been amended replacing “the first conductive coating” with “a first conductive coating” and replacing “the second conductive coating” with “a second conductive coating”. Accordingly, Applicants request that the Examiner withdraw the objection.

Claims 7 and 8 stand objected to for lack of antecedent basis. Claim 7 has been amended to set forth “an output of the light-guide leads to a photo-multiplier input”, which remedies the lack of antecedent basis. Accordingly, Applicants request that the Examiner withdraw the objection.

### **Objections to the Drawings**

The drawings stand objected to under 37 CFR 1.83(a). In amended Fig. 1, the microlenses have been labeled with reference numeral 30. In amended Fig. 3, the microlenses have been labeled with reference numeral 30'. Applicants cannot find the term “active sensor coating” in the claims and, therefore, cannot take corrective action. Fig. 1 has also been amended to include a photo-multiplier 32 and a photo-multiplier input 34. The amendments to Figs. 1 and 3 conform the drawings to the written description. Applicants have also amended the

written description to include reference numerals 30 and 30' for the microlenses, reference numeral 32 for the photo-multiplier, and reference numeral 34 for the photo-multiplier input. Applicants submit that the amendments made to the drawings and written description have not introduced any "new matter" into the specification. Accordingly, Applicants request that the Examiner withdraw the objection.

### **Conclusion**

Applicants have made a bona fide effort to respond to each and every requirement set forth in the Office Action. In view of the foregoing amendments and remarks, this application is submitted to be in complete condition for allowance and, accordingly, a timely notice of allowance to this effect is earnestly solicited. In the event that any issues remain outstanding, the Examiner is invited to contact the undersigned to expedite issuance of this application.

Applicants do not believe any fees are due in connection with filing this communication. If, however, any additional fees are necessary as a result of this communication, the Commissioner is hereby authorized to charge any underpayment or fees associated with this communication or credit any over-payment to Deposit Account No. 23-3000.

Respectfully submitted,  
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Attachments